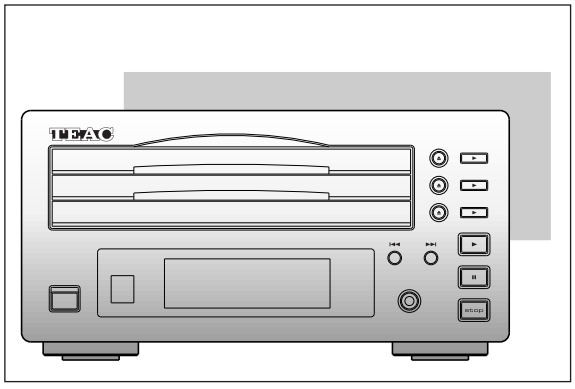

TEAC

SERVICE MANUAL

PD-H303

Compact Disc Player

NOTES

- PC boards shown are viewed from parts side.
- The parts with no reference number or no parts number in the exploded views are not supplied.
- As regards the resistors and capacitors, refer to the circuit diagrams contained in this manual.
- ⚠ Parts marked with this sign are safety critical components.
  They must be replaced with identical components- refer to the appropriate parts list and ensure exact replacement.
- Parts of [ ] mark can be used only with the version designated.
  [DM]: JAPAN [T/C]: U.S.A, CANADA
  [EUR]: EUROPE [UK]: UK

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MEASUREMENT AND ADJUSTMENT METHODS .....
IC PIN FUNCTION .....
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Specifications

Frequency Response	:	20-20,000Hz(±2dB) (playback: ±0.5dB)
Signal to noise ratio	:	95dB (IHF-A)
Dynamic range	:	More than 70dB
Total Harmonic Distortion	:	0.03% (1kHz)
Channel Separation	:	85 dB (1kHz)
Sampling frequency	:	44.1kHz
Error correction	:	CIRC
D/A converter	:	$\Delta\Sigma$ 1bit DAC
Power Consumption	:	12W
Dimensions (W×H×D)	:	215×110×333mm
Weight	:	3.5Kg

Standard Accessories
Audio signal connection cord x 1
Remote control cord x 1

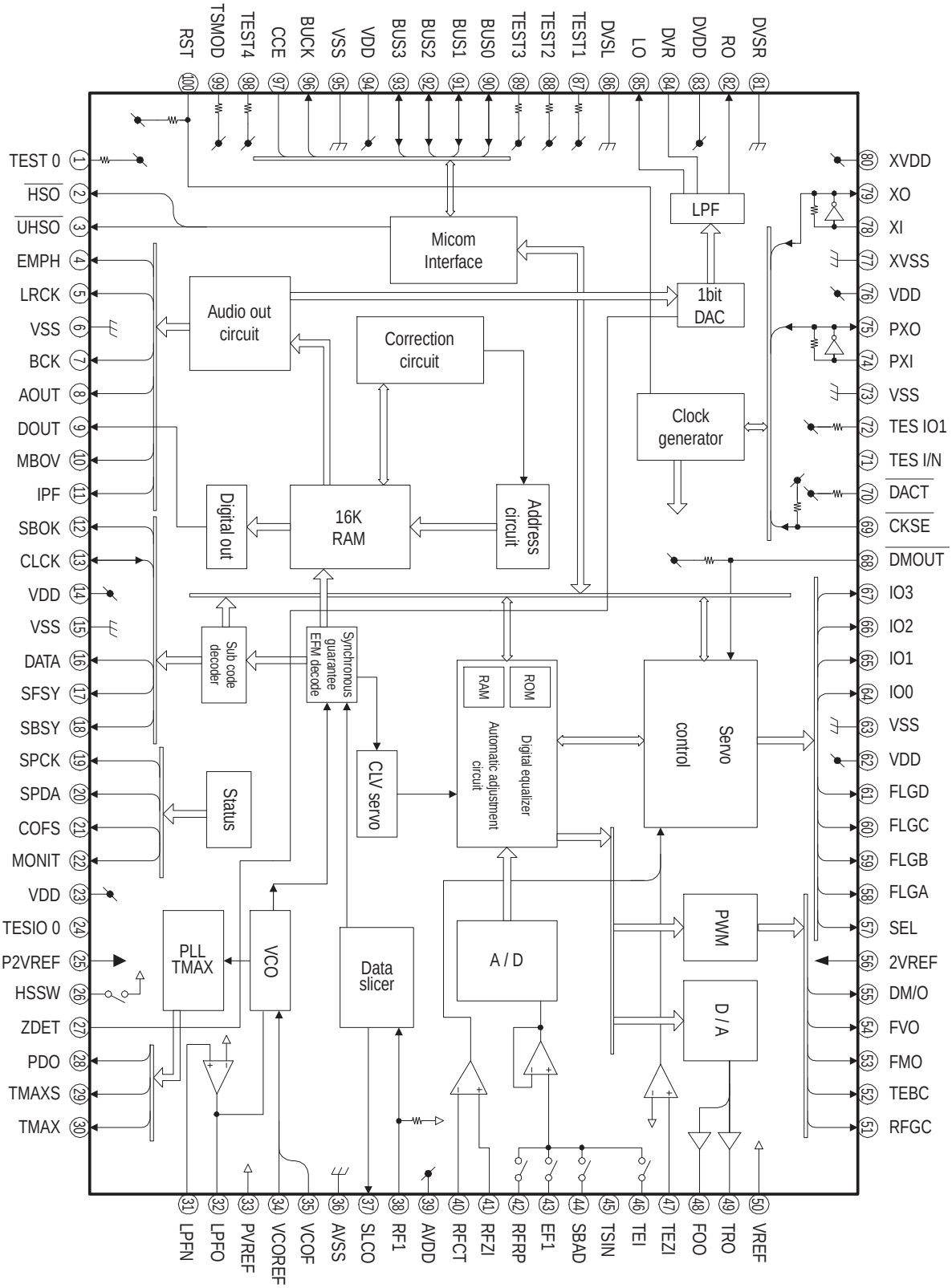
* Design and specifications are subject to change without notice.

TC9432AF/ TC9462AF (Digital Signal Processor)

<table>
<tr><th>PIN No.</th><th>NAME</th><th>I/O</th><th>FUNCTIONAL DESCRIPTION</th><th>REMARKS</th></tr>
<tr><td>1</td><td>TEST0</td><td>-</td><td>Test mode terminal. Normally, keep at open.</td><td>With pull-up resistor.</td></tr>
<tr><td>2</td><td>$\overline{\text{HSO}}$</td><td>O</td><td rowspan="2">Playback speed mode flag output terminal.
<table><tr><th>$\overline{\text{UHSO}}$</th><th>$\overline{\text{HSO}}$</th><th>PLAYBACK SPEED</th></tr><tr><td>H</td><td>H</td><td>Normal</td></tr><tr><td>H</td><td>L</td><td>2 times</td></tr><tr><td>L</td><td>H</td><td>4 times</td></tr><tr><td>L</td><td>L</td><td>-</td></tr></table></td><td rowspan="2">-</td></tr>
<tr><td>3</td><td>$\overline{\text{UHSO}}$</td><td>O</td></tr>
<tr><td>4</td><td>EMPH</td><td>O</td><td>Subcode Q data emphasis flag output terminal.
Emphasis ON at “H” level and OFF at “L” level.
The output polarity can invert by command.</td><td>-</td></tr>
<tr><td>5</td><td>LRCK</td><td>O</td><td>Channel clock output terminal. (44.1 kHz)
L-ch at “L” level and R-ch at “H” level.
The output polarity can invert by command.</td><td>-</td></tr>
<tr><td>6</td><td>V_{SS}</td><td>-</td><td>Digital GND terminal.</td><td>-</td></tr>
<tr><td>7</td><td>BCK</td><td>O</td><td>Bit clock output terminal. (1.4112 MHz)</td><td>-</td></tr>
<tr><td>8</td><td>AOUT</td><td>O</td><td>Audio data output terminal.</td><td>-</td></tr>
<tr><td>9</td><td>DOUT</td><td>O</td><td>Digital data output terminal.</td><td>-</td></tr>
<tr><td>10</td><td>MBOV</td><td>O</td><td>Buffer memory over signal output terminal.
Over at “H” level.</td><td>-</td></tr>
<tr><td>11</td><td>IPF</td><td>O</td><td>Correction flag output terminal.
At “H “ level, AOUT output is made to correction impossibility by C_2 correction processing.</td><td>-</td></tr>
<tr><td>12</td><td>SBOK</td><td>O</td><td>Subcode Q data CRCC check adjusting result output terminal. The adjusting result is OK at “H” level.</td><td>-</td></tr>
<tr><td>13</td><td>CLCK</td><td>I/O</td><td>Subcode P~W data readout clock input/output terminal. This terminal can select by command bit.</td><td>-</td></tr>
<tr><td>14</td><td>V_{DD}</td><td>-</td><td>Digital power supply voltage terminal.</td><td>-</td></tr>
<tr><td>15</td><td>V_{SS}</td><td>-</td><td>Digital GND terminal.</td><td>-</td></tr>
<tr><td>16</td><td>DATA</td><td>O</td><td>Subcode P~W data output terminal.</td><td>-</td></tr>
<tr><td>17</td><td>SFSY</td><td>O</td><td>Playback frame sync signal output terminal.</td><td>-</td></tr>
<tr><td>18</td><td>SBSY</td><td>O</td><td>Subcode block sync signal output terminal.</td><td>-</td></tr>
<tr><td>19</td><td>SPCK</td><td>O</td><td>Processor status signal readout clock output terminal.</td><td>-</td></tr>
<tr><td>20</td><td>SPDA</td><td>O</td><td>Processor status signal output terminal.</td><td>-</td></tr>
<tr><td>21</td><td>COFS</td><td>O</td><td>Correction frame clock output terminal. (7.35 kHz)</td><td>-</td></tr>
<tr><td>22</td><td>MONIT</td><td>O</td><td>Internal signal (DSP internal flag and PLL clock) output terminal. Selected by command.</td><td>-</td></tr>
<tr><td>23</td><td>V_{DD}</td><td>-</td><td>Digital power supply voltage terminal.</td><td>-</td></tr>
<tr><td>24</td><td>TESIO0</td><td>I</td><td>Test input/output terminal. Normally, keep at “L” level.</td><td>-</td></tr>
<tr><td>25</td><td>P2V_{REF}</td><td>-</td><td>PLL double reference voltage supply terminal.</td><td>-</td></tr>
<tr><td>26</td><td>HSSW</td><td>O</td><td>2/4 times speed at “VREF” voltage.</td><td>2-state output (PV_{REF},HiZ)</td></tr>
<tr><td>27</td><td>ZDET</td><td>O</td><td>1 bit DA converter zero detect flag output terminal.</td><td>-</td></tr>
<tr><td>28</td><td>PDO</td><td>O</td><td>Phase difference signal output terminal of EFM signal and PLCK signal.</td><td>3-state output (P2V_{REF},PV_{REF},V_{SS})</td></tr>
<tr><td>29</td><td>TMAXS</td><td>O</td><td>TMAX detection result output terminal. Selected by command bit (TMPS).</td><td>-</td></tr>
<tr><td>30</td><td>TMAX</td><td>O</td><td>TMAX detection result output terminal. Selected by command bit (TMPS).
<table><tr><th>DIFFERENCE RESULT</th><th>TMAX OUTPUT</th></tr><tr><td>Longer than fixed ferq.</td><td>“P2V_{REF}”</td></tr><tr><td>Shorter than fixed freq.</td><td>“V_{SS}”</td></tr><tr><td>Within the fixed freq.</td><td>“HiZ”</td></tr></table></td><td>3-state output (P2V_{REF},HiZ,V_{SS})</td></tr>
</table>

PIN No.	NAME	I/O	FUNCTIONAL DESCRIPTION	REMARKS
31	LPFN	I	LPF amplifier inverting input terminal for PLL.	Analog input.
32	LPFO	O	LPF amplifier output terminal for PLL.	Analog output.
33	PV_{REF}	-	PLL reference voltage supply terminal.	-
34	VCOREF	I	VCO center frequency reference level terminal. Normally, keep at "PV_{REF}" level.	-
35	VCOF	O	VCO filter terminal.	Analog output.
36	AV_{SS}	-	Analog GND terminal.	-
37	SLCO	O	Data slice level output terminal.	Analog output.
38	RFI	I	RF signal input terminal.	Analog input (Zin : selected by command)
39	AV_{DD}	-	Analog power supply voltage terminal.	-
40	RFCT	I	RFRP signal center level input terminal.	Analog input (Zin : 50kΩ)
41	RFZI	I	RFRP zero cross input terminal.	Analog input.
42	RFRP	I	RF ripple signal input terminal.	Analog input.
43	FEI	I	Focus error signal input terminal.	Analog input.
44	SBAD	I	Sub-beam adder signal input terminal.	Analog input.
45	TSIN	I	Test input terminal. Normally, keep at "V_{REF}" level.	Analog input.
46	TEI	I	Tracking error signal input terminal. Track in at tracking servo on.	Analog input.
47	TEZI	I	Trcaking error zero cross input terminal.	Analog input (Zin : 10kΩ)
48	FOO	O	Focus servo equalizer output terminal.	Analog output ($2V_{REF}$~AV_{SS})
49	TRO	O	Tracking servo equalizer output terminal.	
50	V_{REF}	-	Analog reference voltage supply terminal.	-
51	RFGC	O	RF amplitude adjustment control signal output terminal.	3-state PWM signal output. ($2V_{REF}$, V_{REF}, V_{SS}) (PWM carrier = 88.2 kHz)
52	TEBC	O	Tracking balance control signal output terminal.	
53	TEBC	O	Feed equalizer output terminal.	
54	TEBC	O	Speed error signal or feed search equalizer output terminal.	
55	DMO	O	Disk equalizer output terminal. (PWM carrier = 88.2 kHz for DSP, Synchronize to PXO)	3-state PWM signal output.(2VREF, VREF, VSS)
56	$2V_{REF}$	-	Analog double reference voltage supply terminal.	-
57	SEL	O	APC circuit ON/OFF indication signal output terminal. At the laser on time, UHF = L at "HiZ" level and UHF = H at "H" level.	-
58	FLGA	O	Extemal flag output terminal for internal signal. Can select signal from TEZC, $\overline{FOON}$, $\overline{FOK}$ and RFZC by command.	-
59	FLGB	O	Extemal flag output terminal for internal signal. Can select signal from $\overline{DECT}$, $\overline{FOON}$, $\overline{FMON}$ and RFZC by command.	-
60	FLGC	O	Extemal flag output terminal for internal signal. Can select signal from TRON, $\overline{TRSR}$, $\overline{FOK}$ and $\overline{SRCH}$ by command.	-
61	FLGD	O	Extemal flag output terminal for internal signal. Can select signal from $\overline{TRON}$, $\overline{DMON}$, $\overline{HYS}$ and $\overline{SHC}$ by command.	-
62	V_{DD}	-	Digital power supply voltage terminal.	-
63	V_{SS}	-	Digital GND terminal.	-
64	IO0	I/O	General I/O terminal. Can change over input port or output port by command. At the input mode time can readout a state of terminal (H/L) by read command. At the output mode time can control a state of terminal (H/L/HiZ) by command.	-
65	IO1			
66	IO2			
67	IO3			

PIN No.	NAME	I/O	FUNCTIONAL DESCRIPTION	REMARKS
68	$\overline{\text{DMOUT}}$	I	This terminal controls IO0~IO3 terminal. At "L" level time, IO0, 1 out feed equalizer signal of 2-state PWM. IO2, 3 out disk equalizer signal of 2-state PWM.	With pull-up resistor.
69	$\overline{\text{CKSE}}$	I	Normally, keep at open.	With pull-up resistor.
70	$\overline{\text{DACT}}$	I	DAC test mode terminal. Normally, keep at open.	With pull-up resistor.
71	TESIN	I	Test input terminal. Normally, keep at "L" level.	Analog input.
72	TESIO1	I	Test input/output terminal. Normally, keep at "L" level.	Analog input.
73	V_{SS}	-	Digital GND terminal.	-
74	PXI	I	Crystal oscillator connecting input terminal for DSP. Normally, keep at "L" level.	-
75	PXO	O	Crystal oscillator connecting output terminal for DSP.	
76	V_{DD}	-	Digital power supply voltage terminal.	-
77	XV_{SS}	-	Oscillator GND terminal for system clock.	-
78	XI	I	Crystal oscillator connecting input terminal for system clock.	-
79	XO	O	Crystal oscillator connecting output terminal for system clock.	-
80	XV_{DD}	-	Oscillator power supply voltage terminal for system clock.	-
81	DV_{SR}	-	Analog GND terminal for DA converter. (R-ch)	-
82	RO	O	R channel data forward output terminal.	-
83	DV_{DD}	-	Analog supply voltage terminal for DA converter.	-
84	DVR	-	Reference voltage terminal for DA converter.	-
85	LO	O	L channel data forward output terminal.	-
86	DV_{SL}	-	Analog GND terminal for DA converter. (L-ch)	-
87	TEST1	I	Test mode terminal. Normal, keep at open.	With pull-up resistor.
88	TEST2	I	Test mode terminal. Normal, keep at open.	With pull-up resistor.
89	TEST3	I	Test mode terminal. Normal, keep at open.	With pull-up resistor.
90	BUS0	I/O	Micom interface data input/output terminal.	Schmit input. With pull-up resistor.
91	BUS1	I/O		
92	BUS2	I/O		
93	BUS3	I/O		
94	V_{DD}	-	Digital Ppower supply voltage terminal.	-
95	V_{SS}	-	Digital GND terminal.	-
96	BUCK	I	Micom interface clock input terminal.	Schmit input.
97	$\overline{\text{CCE}}$	I	Command and data sending/receiving chip enable signal input terminal. The bus line becomes active at "L" level.	Schmit input.
98	TEST4	I	Test mode terminal. Normal, keep at open.	With pull-up resistor.
99	$\overline{\text{TSMOD}}$	I	Local test mode selection terminal.	With pull-up resistor.
100	$\overline{\text{RST}}$	I	Reset signal input terminal. Reset at "L" level.	With pull-up resistor.


RST 100
TSMOD 99
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BUCK 96
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VDD 94
BUS3 93
BUS2 92
BUS1 91
BUS0 90
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TEST2 88
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UHSO 3
EMPH 4
LRCK 5
VSS 6
BCK 7
AOUT 8
DOUT 9
MBOV 10
IPF 11
SBOK 12
CLCK 13
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VDD 76
PXO 75
PXI 74
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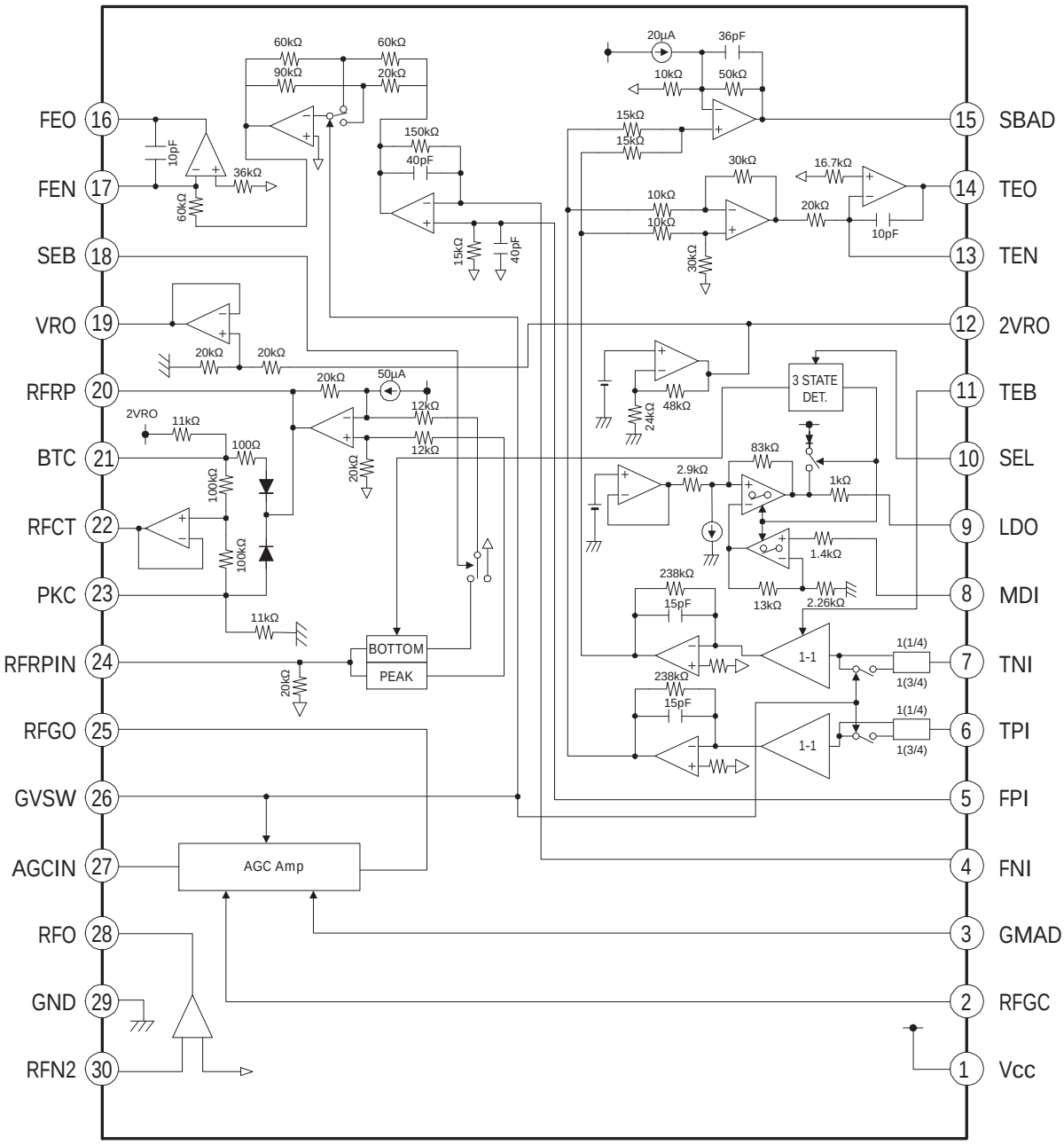
LPF
Micom Interface
1bit DAC
Audio out circuit
Correction circuit
Clock generator
Digital out
16K RAM
Address circuit
Sub code decoder
Synchronous guarantee EFM decode
RAM
ROM
Digital equalizer
Automatic adjustment circuit
Servo control
Status
CLV servo
PLL TMAX
VCO
Data slicer
A / D
PWM
D / A

TA2150FN

<table>
<tr><th>PIN No.</th><th>SYMBOL</th><th>I/O</th><th>FUNCTION DESCRIPTION</th><th>REMARKS</th></tr>
<tr><td>1</td><td>VCC</td><td>-</td><td>Power supply input terminal.</td><td>-</td></tr>
<tr><td>2</td><td>RFGC</td><td>I</td><td>RF amplitude adjustment control signal input terminal.
Controlled by 3-PWM signals.
(PWM carrier = 88.2kHz)</td><td>3 signals input.
(2VRO, VRo, GND)</td></tr>
<tr><td>3</td><td>GMAD</td><td>I</td><td>Open loop gain adjustment terminal for AGC amp.</td><td>(Note 1)</td></tr>
<tr><td>4</td><td>FNI</td><td>I</td><td>Main beam I-V amp input terminal.</td><td>Connected to pin diode output B + D
(through resistor)</td></tr>
<tr><td>5</td><td>FPI</td><td>I</td><td>Main beam I-V amp input terminal.</td><td>Connected to pin diode output A + C
(through resistor)</td></tr>
<tr><td>6</td><td>TPI</td><td>I</td><td>Sub beam I-V amp input terminal.</td><td>Connected to pin diode output F.</td></tr>
<tr><td>7</td><td>TNI</td><td>I</td><td>Sub beam I-V amp input terminal.</td><td>Connected to pin diode output E.</td></tr>
<tr><td>8</td><td>MDI</td><td>I</td><td>Monitor photo diode amp input terminal.</td><td>Connected to pin monitor photo diode.</td></tr>
<tr><td>9</td><td>LDO</td><td>O</td><td>Laser diode amp input terminal.</td><td>Connected to laser diode control circuit.</td></tr>
<tr><td>10</td><td>SEL</td><td>I</td><td>Laser diode control signal input terminal and APC circuit ON/OFF control signal terminal.
<table>
<tr><th>SEL LEVEL</th><th>APC CIRCUIT</th><th>LDO</th><th>DETECT FREQUENCY</th></tr>
<tr><td>GND</td><td>OFF</td><td>Connected to Vcc through resister (1 kΩ)</td><td>Low</td></tr>
<tr><td>Hiz</td><td>ON</td><td>Control signal output</td><td>Low</td></tr>
<tr><td>Vcc</td><td>ON</td><td>Control signal output</td><td>High</td></tr>
</table></td><td>3 signals input.
(Vcc, Hiz, GND)</td></tr>
<tr><td>11</td><td>TEB</td><td>I</td><td>Tracking error balance adjustment signal input terminal. Controlled by 3-PWM signal.
(PWM carrier = 88.2 kHz)</td><td>3 signals input
(2VRO, VRO, GND)</td></tr>
<tr><td>12</td><td>2VRO</td><td>O</td><td>Reference voltage (2VRO) output terminal.
2VRO = 4.2 V when Vcc = 5 V</td><td>-</td></tr>
<tr><td>13</td><td>TEN</td><td>I</td><td>TE amp negative input terminal.</td><td>Connected to TEO through feedback resistor.</td></tr>
<tr><td>14</td><td>TEO</td><td>O</td><td>TE error signal output terminal.</td><td>-</td></tr>
<tr><td>15</td><td>SBAD</td><td>O</td><td>Sub beam adder signal output terminal.</td><td>-</td></tr>
<tr><td>16</td><td>FEO</td><td>O</td><td>Focus error signal output terminal.</td><td>-</td></tr>
<tr><td>17</td><td>FEN</td><td>I</td><td>FE amp negative input terminal.</td><td>Connected to FEO through feedback resistor.</td></tr>
<tr><td>18</td><td>SEB</td><td>I</td><td>RFRP output circuit suitching terminal.
<table>
<tr><th>SEB LEVEL</th><th>BOTTON DETECTION</th><th>PEAK DETECTION</th></tr>
<tr><td>GND</td><td>GND</td><td>GND</td></tr>
<tr><td>GND</td><td>GND</td><td>GND</td></tr>
</table></td><td>Low (GND) is for normal use.</td></tr>
</table>

TA2150FN

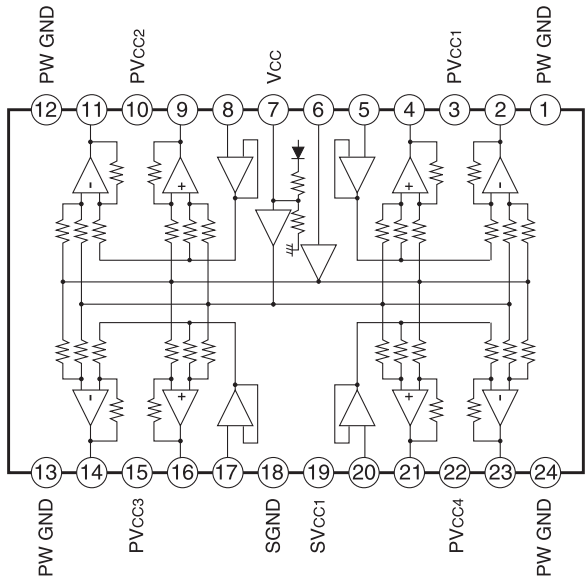
PIN No.	SYMBOL	I/O	FUNCTION DESCRIPTION	REMARKS
19	VRO	O	Reference signal (VRO) output terminal. VRO = 2.1 V when Vcc = 5 V	-
20	RFRP	O	Track count signal output terminal.	-
21	BTC	I	Time constant adjustment terminal for bottom detection.	Adjusted by capacitance.
22	RFCT	O	RFRP signal center level output terminal.	-
23	PKC	I	Time constant adjustment terminal for peak detection.	Adjusted by capacitance.
24	RFRPIN	I	Input terminal for track count signal output amp.	-
25	RFGO	O	Output terminal for RF signal amplitude adjustment amp.	-
26	GVSW	I	Amp (AGC, FE, TE) gain switching terminal. GVSW: GND → MODE: CD-RW; GVSW: Hiz → MODE: Normal; GVSW: Vcc → MODE: Normal	Low (GND) is for 5 times gain.
27	AGCIN	I	Input terminal for RF signal amplitude adjustment amp.	Connected to RFO through capacitance.
28	RFO	O	Output terminal RF signal amp.	-
29	GND	-	Ground terminal.	-
30	RFN2	I	input terminal for RF signal amp.	Connected to pin-diode output A + B + C + D (through resistor).


FEO 16
FEN 17
SEB 18
VRO 19
RFRP 20
BTC 21
RFCT 22
PKC 23
RFRPIN 24
RFGO 25
GVSW 26
AGCIN 27
RFO 28
GND 29
RFN2 30
15 SBAD
14 TEO
13 TEN
12 2VRO
11 TEB
10 SEL
9 LDO
8 MDI
7 TNI
6 TPI
5 FPI
4 FNI
3 GMAD
2 RFGC
1 Vcc
60kΩ
90kΩ
20kΩ
10pF
36kΩ
150kΩ
40pF
15kΩ
20µA
36pF
10kΩ
50kΩ
30kΩ
16.7kΩ
2VRO
11kΩ
100Ω
100kΩ
50µA
12kΩ
24kΩ
48kΩ
3 STATE DET.
83kΩ
2.9kΩ
1kΩ
1.4kΩ
238kΩ
15pF
13kΩ
2.26kΩ
1-1
1(1/4)
1(3/4)
BOTTOM
PEAK
AGC Amp

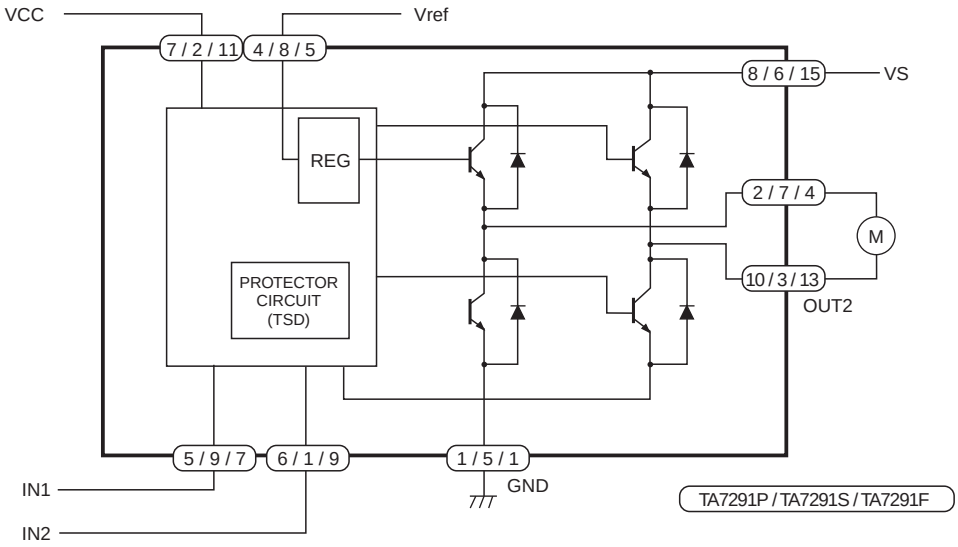
TA2092N (POWER DRIVER)

PIN No.	NAME	DESCRIPTION
1	PW GND	Power GND Connected to substrate. ①, ⑫, ⑬, ㉔ pin are connected inside.
2	OUT (-) 1	Inverted output for CH1
3	PV_{CC1}	Supply terminal of output stage for CH1 Supply terminal of output stage are not connected to other channel terminal.
4	OUT (+) 1	Non-inverted output for CH1
5	V_{IN1}	Input for CH1. Not biased inside
6	V_{RI}	Input reference voltage Under condition of $V_{RI} \leqq$ 1.8V, internal bias circuit is shut off. No signal input condition : $V_{RI} = V_{IN}$
7	V_{CI}	Output reference voltage. $V_{OUT} = V_{CI} = (V_{CC}-V_F)/2$
8	V_{IN2}	Input for CH2
9	OUT (+) 2	Non-inverted output for CH2
10	PV_{CC2}	Supply terminal of output stage for CH2
11	OUT (-) 2	Inverted output for CH2
12	PW GND	Power GND
13	PW GND	Power GND
14	OUT (-) 3	Inverted output for CH3
15	PV_{CC3}	Supply terminal of output stage for CH3
16	OUT (+) 3	Non-inverted output for CH3
17	V_{IN3}	Input for CH3
18	S GND	Supply terminal of small signal GND
19	S V_{CC}	Small signal GND
20	V_{IN4}	Input for CH4
21	OUT (+) 4	Non-invered output for CH4
22	PV_{CC4}	Supply terminal of output stage for CH4
23	OUT (-) 4	Inverted output for CH4
24	PW GND	Power GND

BLOCK DIAGRAM



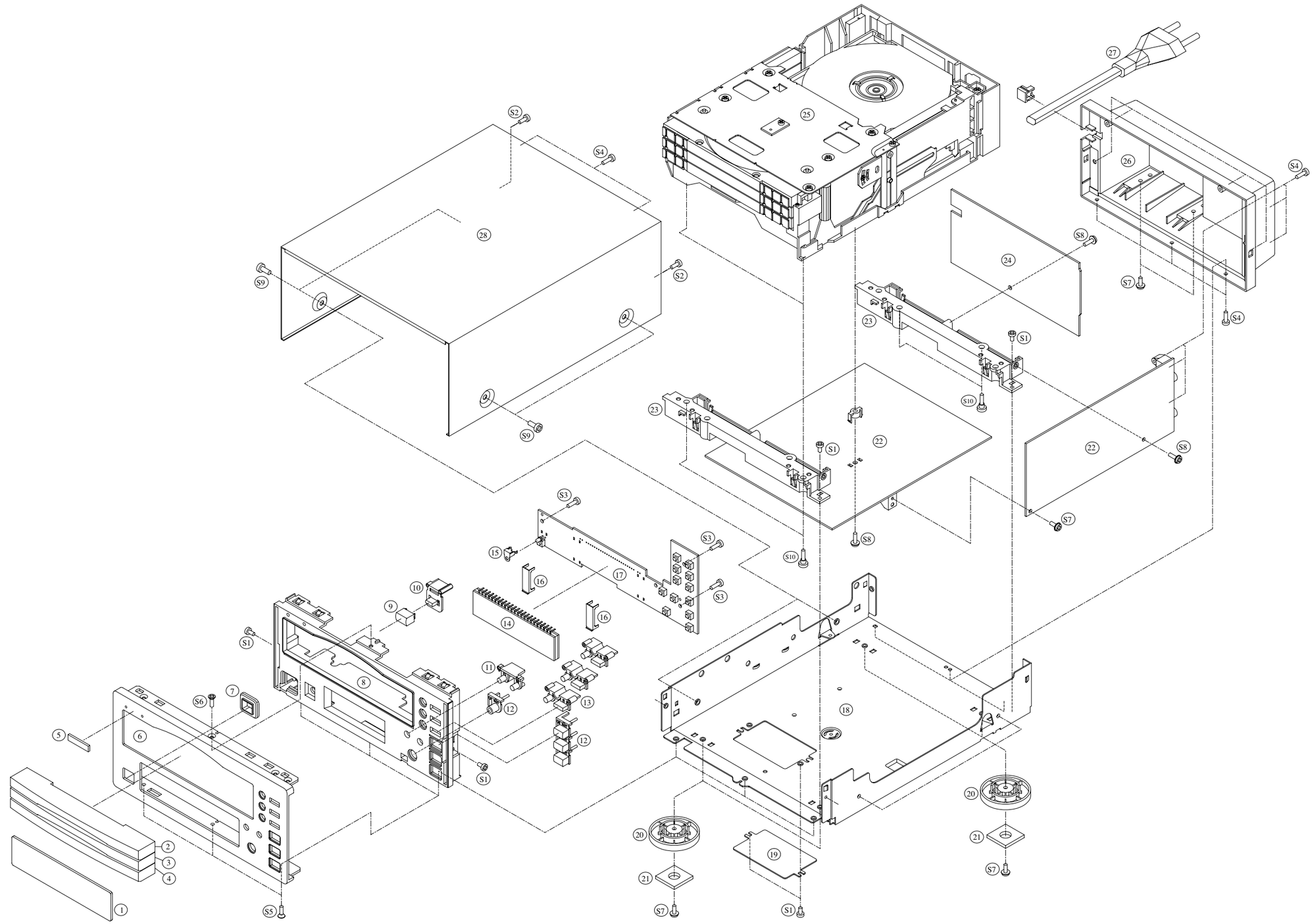
TA7291S (Bridge Driver)



PIN No.		SYMBOL	FUNCTIONAL DESCRIPTION
P	S		
7	2	V_{CC}	Supply voltage terminal for Logic
8	6	V_S	Supply voltage terminal for motor drive
4	8	Vref	Supply voltage terminal for control
1	5	GND	GND terminal
5	9	IN1	Input terminal
6	1	IN2	Input terminal
2	7	OUT1	Output terminal
10	3	OUT2	Output terminal

- P Type : PIN ③, ⑨ : NC
- S Type : PIN 4 : NC
- F Type : PIN ②, ③, ⑥, ⑧, ⑩, ⑫, ⑭, and ⑯ : NC
- For F Type, We recommend FIN to be connected to the GND.

EXPLODED VIEW-1



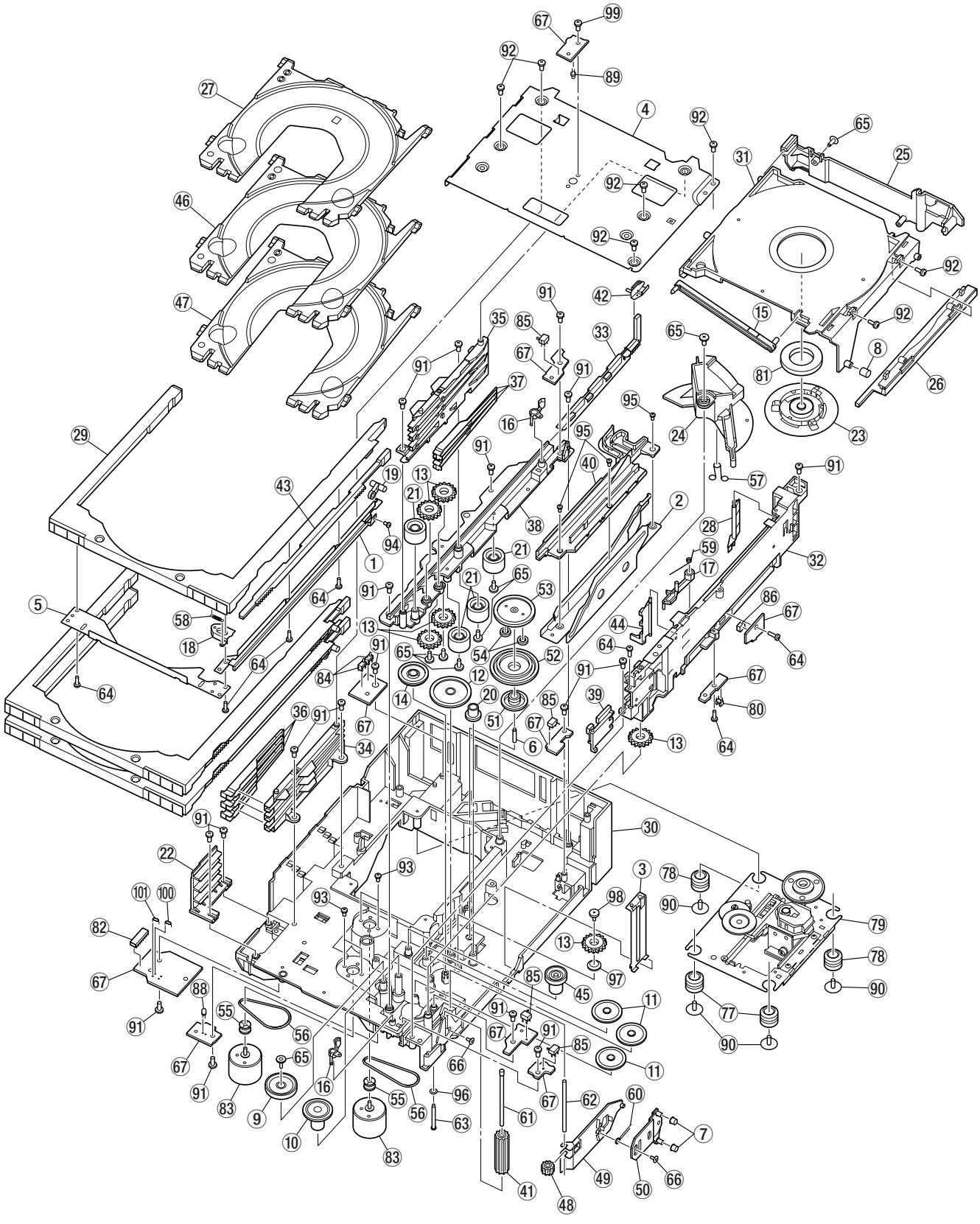
EXPLODED VIEW-1

REF.NO.		PARTS NO.	DESCRIPTION	REMARKS
1- 1		9A08866900	WINDOW,FIP	KGU1A154X
1- 2		9A08866700	ORNAMENT,DOOR(1)	KGR1A199M9ZK79
1- 3		9A08866200	ORNAMENT,DOOR(2)	KGR1A199M9YK79
1- 4		9A08866800	ORNAMENT,DOOR(3)	KGR1A200M9ZK79
1- 5		9A06224200	BADGE,TEAC	BGB1A047
1- 6		9A08867400	PANEL,FRONT(AL)	KKM1A100ZC11
1- 7		9A06863300	INDICATOR,STAND BY	KGL1A133
1- 8		9A08867300	PANEL,FRONT	KGW1A285M9K80
1- 9		9A07287200	CAP,STANBY	KBT1A495M9K79
1-10		9A06862500	KNOB,STAND BY	KBT1A483
1-11		9A06868300	KNOB,CPS	KBT1A493MBC13
1-12		9A08867200	KNOB,OPERATION	KBT2A494M9ZK79
1-13		9A08867100	KNOB,TACT	KBT1A717M9ZK79
1-14		9A08868000	FIP	KFLHNA05SS29
1-15		9A07290100	SUPPORT,LED	KMD1A376
1-16		9A07290000	BRACKET,FLT	KMD1A374
1-17		9A08867500	FRONT PCB ASSY	KOP11362B
1-18		9A08871400	CHASSIS,BOTTOM	KUA2A186
1-19		9A08871500	PLATE,BOTTOM	KUA3A186
1-20		9A06864400	FOOT	KKL2A055M9K63
1-21		9A05837300	FOOT CUSHION	KHG1A050Y
1-22		9A08869300	MAIN PCB ASSY [US,C]	KOP11361B
		9A08869310	MAIN PCB ASSY [E]	KOP11361C
1-23		9A08869100	SUPPORT,MECHA	KMH1A112
1-24		9A08870600	POWER PCB ASSY [US,C]	KOP11363B
		9A08870610	POWER PCB ASSY [E]	KOP11363E
1-25		9A08868600	MACHANISM,3 CD CHANGER	BJDMGCF3000
1-26		9A08868800	PANEL,REAR	KKF1A205
1-27	⚠	9A08043100	CORD,POWER [US,C]	BJA523FBY
	⚠	9A08152100	CORD,POWER [E]	BJA2B043Z
1-28		9A08868300	CABINT,TOP	KKC2B112S21
F401	⚠	9A06545400	FUSE [US,C]	KBA2C0630TLU
F401	⚠	9A06868100	FUSE [E]	KBA2C0315TLE
		9A08868900	CORE,RING [US,C]	KLZ9Z007Z
		9A08038100	RING,FERRITE [E]	KLZ9W001Z

INCLUDED ACCESSORIES

REF.NO.	PARTS NO.	DESCRIPTION	REMARKS
	9A08523900	OWNER'S MNL [US,C]	KQX1A611Z
	9A08524000	OWNER'S MNL [E]	KQX1A637Z
	9A05935900	CORD,PIN	KJS4M014Y
	9A05936000	CORD,PIN	KJS4N001Y

EXPLODED VIEW-2



EXPLODED VIEW-2

REF.NO.	PARTS NO.	DESCRIPTION
2- 1	9A08676300	REINFORCING HARDWARE(S)
2- 2	9A08676400	SLIDER(LIFT)
2- 3	9A08676500	REINFOTCING HARDWARE(R)
2- 4	9A08676600	REINFOTCING HARDWARE(TOP)
2- 5	9A08676700	REINFOTCING HARDWARE(F)
2- 6	9A08676800	SHAFT(GEAR-C)
2- 7	9A08676900	SHAFT(HOLDER GEAR)
2- 8	9A08677000	SHAFT(HOLDER TRAY)
2- 9	9A08677100	PULLEY
2- 10	9A08677200	GEAR(TRAY MOTOR-A)
2- 11	9A08677300	GEAR(TRAY MOTOR-B)
2- 12	9A08677400	GEAR(TRAY MOTOR-C)
2- 13	9A08677500	GEAR(TRAY-A)
2- 14	9A08677600	GEAR(LIFT MOTOR-A)
2- 15	9A08677700	ARM(JOINT)
2- 16	9A08677800	ARM(LOAD SW)
2- 17	9A08677900	LACK(GEAR)
2- 18	9A08678000	ARM(TRAY-SUB)
2- 19	9A08678100	ARM(TRAY-LOCK)
2- 20	9A08678200	GEAR(LIFT-IDLER)
2- 21	9A08678300	GEAR(IDLER)
2- 22	9A08678400	GUIDE(TRAY OUTER-L)
2- 23	9A08678500	CLAMPER
2- 24	9A08678600	CAM(LIFT)
2- 25	9A08678700	HOLDER(LIFT)
2- 26	9A08678800	HOLDER(TRAY-R)
2- 27	9A08678900	TRAY(SUB)
2- 28	9A08679000	ARM(SWITCH CLOSE)
2- 29	9A08679100	TRAY(MAIN)
2- 30	9A08679200	CHASSIS(MAIN)
2- 31	9A08679300	HOLDER(TRAY TOP)
2- 32	9A08679400	GUIDE(TRAY OUTER)
2- 33	9A08679500	SLIDER(TRAY-B)
2- 34	9A08679600	GUIDE(TRAY-L)
2- 35	9A08679700	GUIDE(TRAY-R)
2- 36	9A08679800	ARM(TRAY CATCH-L)
2- 37	9A08679900	ARM(TRAY CATCH-R)
2- 38	9A08680000	CHASSIS(GUIDE)
2- 39	9A08680100	GUIDE(TRAY MID)
2- 40	9A08680200	GUIDE(CAM)
2- 41	9A08680300	GEAR(TRAY-IDLER)
2- 42	9A08680400	SLIDER(TRAY-A)
2- 43	9A08680500	SLIDER(TRAY LOCK)
2- 44	9A08680600	ARM(SWITCH OPEN)
2- 45	9A08680700	PULLEY(B)
2- 46	9A08680800	TRAY(SUB-2)
2- 47	9A08680900	TRAY(SUB-3)
2- 48	9A08681000	GEAR(TRAY-FINAL)
2- 49	9A08681100	HOLDER(GEAR-B)
2- 50	9A08681200	HOLDER(GEAR-C)
2- 51	9A08681400	GEAR(SUN)
2- 52	9A08681500	GEAR(INTERNAL)
2- 53	9A08681600	GEAR(CARRIER)
2- 54	9A08681700	GEAR(PLANET)
2- 55	9A08681800	PULLEY(MOTOR-A)

REF.NO.	PARTS NO.	DESCRIPTION
2- 56	9A08681900	BELT
2- 57	9A08682000	TORSION SPRING(CAM LIFT)
2- 58	9A08682100	EXTENSION SPR(TRAY LOCK)
2- 59	9A08682200	TORSION SPR(LACK GEAR)
2- 60	9A08682300	TORSION SPR(HOLDER GEAR)
2- 61	9A08682400	SHAFT(GEAR-B)
2- 62	9A08682500	SHAFT(GEAR-A)
2- 63	9A08682600	SHAFT(PULLEY)
2- 64	9A08682700	SCREW(TRAY)
2- 65	9A07827800	SCREW(A2)
2- 66	9A07825200	SCREW(SUB-L)
2- 67	9A08682800	PCB(MAIN)
2- 77	9A07825700	INSULATOR 37(BLUE)
2- 78	9A07825800	INSULATOR 25(GREEN)
2- 79	9A08683800	TRAVERSE UNIT
2- 80	9A08683900	PHOTO INT,GP1S93
2- 81	9A08684000	MAGNET(2)
2- 82	9A08684100	CONNECTOR,15FMN-STK
2- 83	9A08684200	DC MOTOR,MDN4BT3MEA
2- 84	9A08684300	SWITCH,MPU10184MLBO
2- 85	9A08684400	SWITCH,MPU11470MLBO
2- 86	9A08684500	SWITCH,MPU11301MLBO
2- 88	9A07825000	PHOTO TR,RPT-38PB3F
2- 89	9A07746000	LED,SIR-34ST3F
2- 90	9A07827900	SCREW,TAP TITE 2.6X6
2- 91	9A08684600	SCREW,BIND TAPPING 2.6X8
2- 92	9A08684700	SCREW,BIND TAPPING 2.6X6(BL)
2- 93	9A08684800	SCREW,SEMS 2X4
2- 94	9A08684900	SCREW,TAPPING 2X3.5
2- 95	9A08685000	SCREW,MACHINE M2X2.5
2- 96	9A08685100	POLY WS,1.57X4X0.5 CUT
2- 97	9A08685200	COMPRESSION SPRING(GEAR)
2- 98	9A08685300	SCREW(GEAR)
2- 99	9A08685400	SCREW,BIND TAPTITE 2.6X6
2-100	9A08685500	RESISTOR,390 OHM
2-101	9A07828000	RESISTOR,330 OHM

MAIN PCB ASSY

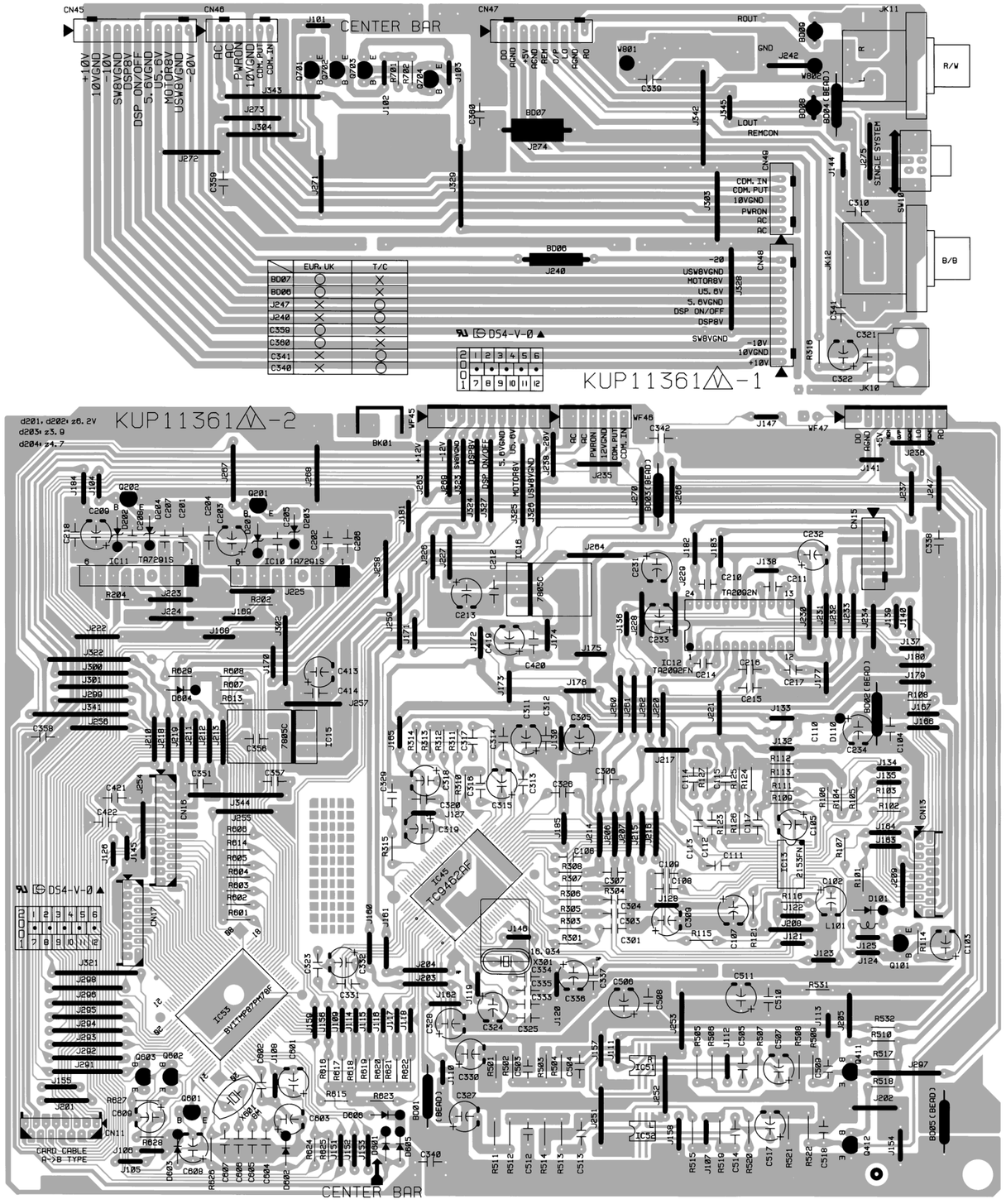
REF.NO.		PARTS NO.	DESCRIPTION
		9A08869300	MAIN PCB ASSY [US,C]
		9A08869310	MAIN PCB ASSY [E]
		9A08869500	PCB,MAIN
BD01-BD05		9A07050600	BEAD,CORE
BD08,BD09		9A05968600	COIL,BEAD
BK10		9A07308700	BRACKET,PCB
CN13		9A08220300	WAFER,CARD CABLE
CN15		9A05329700	WAFER,MOLEX53014-0610
CN45		9A08219800	WAFER
CN46		9A07889700	WAFER,MOLEX35336-0610
CN47		9A07890100	WAFER,MOLEX35336-0910
CN48		9A08219800	WAFER
CN49		9A07889700	WAFER,MOLEX35336-0610
D101		9A01390500	DIODE,1N4148MT
D201,D202		9A08869600	DIODE,ZENER UZ5.6BSCT
D203		9A08869700	DIODE,ZENER UZ3.6BSBT
D204		9A08869800	DIODE,ZENER UZ4.3BSBT
D601-D606		9A01390500	DIODE,1N4148MT
IC10,IC11	⚠	9A08788600	IC,TA7291S
IC12	⚠	9A08788400	IC,TA2092N
IC13		9A08788500	IC,TA2150FN
IC15,IC16	⚠	9A07871100	IC,NJM7805FA
IC45		9A08788700	IC,TC9462F
IC51,IC52		9A07343300	IC,NJM2068MD-TE1
IC53		9A06786000	IC,TMP87PM78F
JK10		9A06239100	MODULE,OPTICAL
JK11		9A08870300	JACK,LINE IN TERMINAL
JK12		9A08870500	JACK,IN/OUT
L101		9A05356900	COIL,AXAIL 10UH K
Q101		9A05895900	TR,KTA1266YT
Q201,Q202		9A08791100	TR,KRC107M
Q411,Q412		9A05197500	TR,KTD1302T
Q601		9A08791100	TR,KRC107M
Q602		9A08869900	TR,KRA104M
Q603,Q701		9A08791100	TR,KRC107M
Q702		9A08869900	TR,KRA104M
Q703,Q704		9A05939600	TR,KTC3227Y
SW10		9A06675300	SW,SLIDE
WF45		9A08219900	CONNECTOR
WF46		9A07889800	CONNECTOR,MOLEX35237-0610
WF47		9A07890200	CONNECTOR,MOLEX35237-0910
X301		9A04275700	CRYSTAL,16.9344MHZ
X601		9A05193000	CRYSTAL

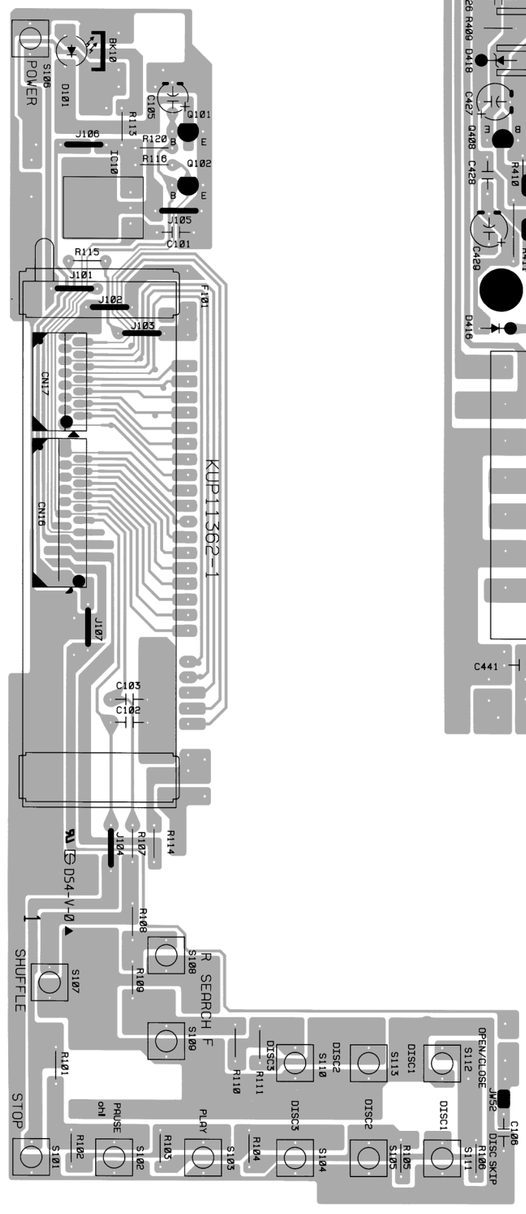
FRONT PCB ASSY

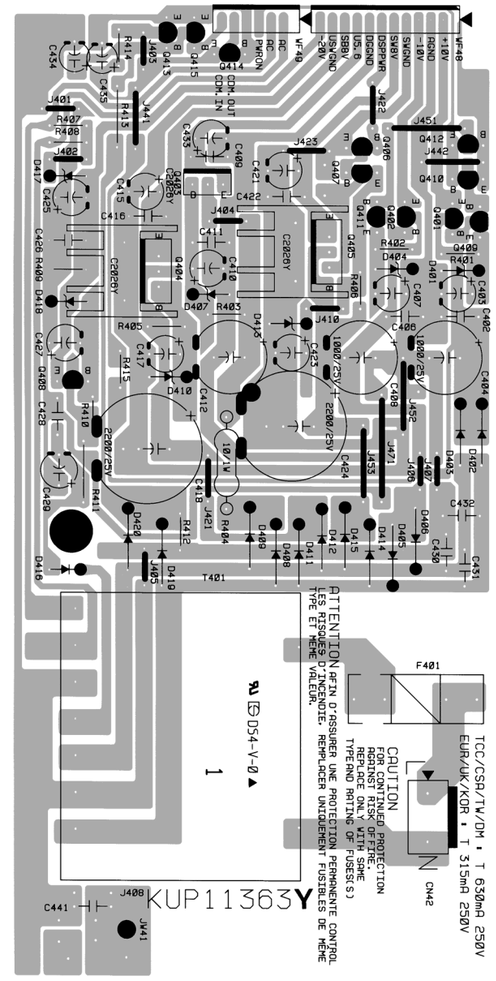
REF.NO.	PARTS NO.	DESCRIPTION
	9A08867500	FRONT PCB ASSY
	9A08867700	PCB,FRONT
	9A07290000	BRACKET,FLT
BK10	9A07290100	SUPPORT,LED
D101	9A08131100	LED,YELLOW
F101	9A08868000	FIP
IC10	9A06757900	SENSOR,REMOCON
Q101,Q102	9A08791100	TR,KRC107M
S101-S113	9A06671200	SW,TACT EVQ21505R

POWER PCB ASSY

REF.NO.		PARTS NO.	DESCRIPTION
		9A08870600	POWER PCB ASSY [US,C]
		9A08870610	POWER PCB ASSY [E]
		9A08870800	PCB,POWER
		9A05328200	HOLDER,FUSE
		9A05333500	HEAT SINK
C404,C408	⚠	9A06226700	C,ELECT 1000UF/25V
C418,C424	⚠	9A05976300	C,ELECT 2200UF/35V
C429	⚠	9A06764800	C,ELECT 100UF/50V
CN42		9A06674400	WAFER
D401		9A06877100	DIODE,ZENER MTZJ10BT
D402,D403	⚠	9A05194700	DIODE,1N4003ST
D404		9A06877100	DIODE,ZENER MTZJ10BT
D405,D406	⚠	9A05194700	DIODE,1N4003ST
D407		9A06236200	DIODE,ZENER MTZJ6.2BT
D408,D409	⚠	9A05194700	DIODE,1N4003ST
D410		9A08221500	DIODE,ZENER MTZJ9.1BMT
D411,D412	⚠	9A05194700	DIODE,1N4003ST
D413		9A08221500	DIODE,ZENER MTZJ9.1BMT
D414,D415	⚠	9A05194700	DIODE,1N4003ST
D416	⚠	9A05194600	DIODE,1N4003SRT
D417		9A06236200	DIODE,ZENER MTZJ6.2BT
D418		9A07294300	DIODE,ZENER MTZJ20BT
D419,D420		9A05194700	DIODE,1N4003ST
Q401	⚠	9A05196800	TR,KSC2316-Y-SHTA
Q402	⚠	9A05196700	TR,KSA916-Y-SHTA
Q403-Q405	⚠	9A08745700	TR,KTC2026Y
Q406		9A08791100	TR,KRC107M
Q407		9A08869900	TR,KRA104M
Q408	⚠	9A05196700	TR,KSA916-Y-SHTA
Q409		9A08869900	TR,KRA104M
Q410,Q411		9A05218700	TR,KTC114YST
Q412		9A08869900	TR,KRA104M
Q413		9A05218700	TR,KTC114YST
Q414		9A08869900	TR,KRA104M
Q415		9A05218700	TR,KTC114YST
R404	⚠	9A05338000	R,METAL 10 OHM 1W J
T401	⚠	9A08871300	TRANS,POWER [US,C]
T401	⚠	9A08789900	TRANS,POWER [E]
WF48		9A08219900	CONNECTOR
WF49		9A07889800	CONNECTOR,MOLEX35237-0610


KUP11361-2
CENTER BAR
KUP11361-1
CENTER BAR
CARD CABLE A->B TYPE
D54-V-0
EUR,UK T/C
BD07 O X
BD06 X X
J247 X O
J240 O O
C359 X X
C360 O X
C341 X O
C340 O X


KUP11362-1
POWER
SHUFFLE
STOP
R SEARCH F
PAUSE
PLAY
DISC1
DISC2
DISC3
OPEN/CLOSE
DISC SKIP
D54-V-0


KUP11363Y
ATTENTION APRES D'OPERATION DE REMPLACEMENT DES FUSIBLES, RESPECTER LE TYPE ET MEME VALEUR.
CAUTION FOR CONTINUED PROTECTION AGAINST RISK OF FIRE, REPLACE ONLY WITH SAME TYPE AND RATING OF FUSE(S).
TCC/CSA/TW/DM : T 630mA 250V
EUR/UK/KOR : T 315mA 250V
D54-V-0